

isolating a biological sample from a mammal; and

testing the sample by screening for a polymorphism in a *Hox A1* or *B1* gene product, which is a genetic marker for autism.

33. (Amended) The method according to claim 32, wherein said screening for [the polypeptide resulting from said gene having in] a polymorphism in a *Hox A1* or *B1* gene product is carried out by a method selected from the group consisting of probing with an antibody specific to said gene product, measurement of the concentration of said gene product, and measuring the size of said gene product.

34. (Amended) The method according to claim 33, wherein said screening is carried out by probing with an antibody specific to said gene product.

35. (Amended) The method according to claim 33, wherein said screening is carried out by measuring the size of said gene product.

37. (Amended) An isolated polypeptide encoded by a nucleic acid molecule comprising a single base substitution at nucleotide 218 in SEQ. ID. No.1 or a fragment having at least 15 nucleotides encompassing said single base substitution

41. (Amended) An isolated polypeptide encoded by a nucleic acid molecule comprising an insertion between nucleotides 88 and 89 in SEQ ID No.5.